

FIG. 1

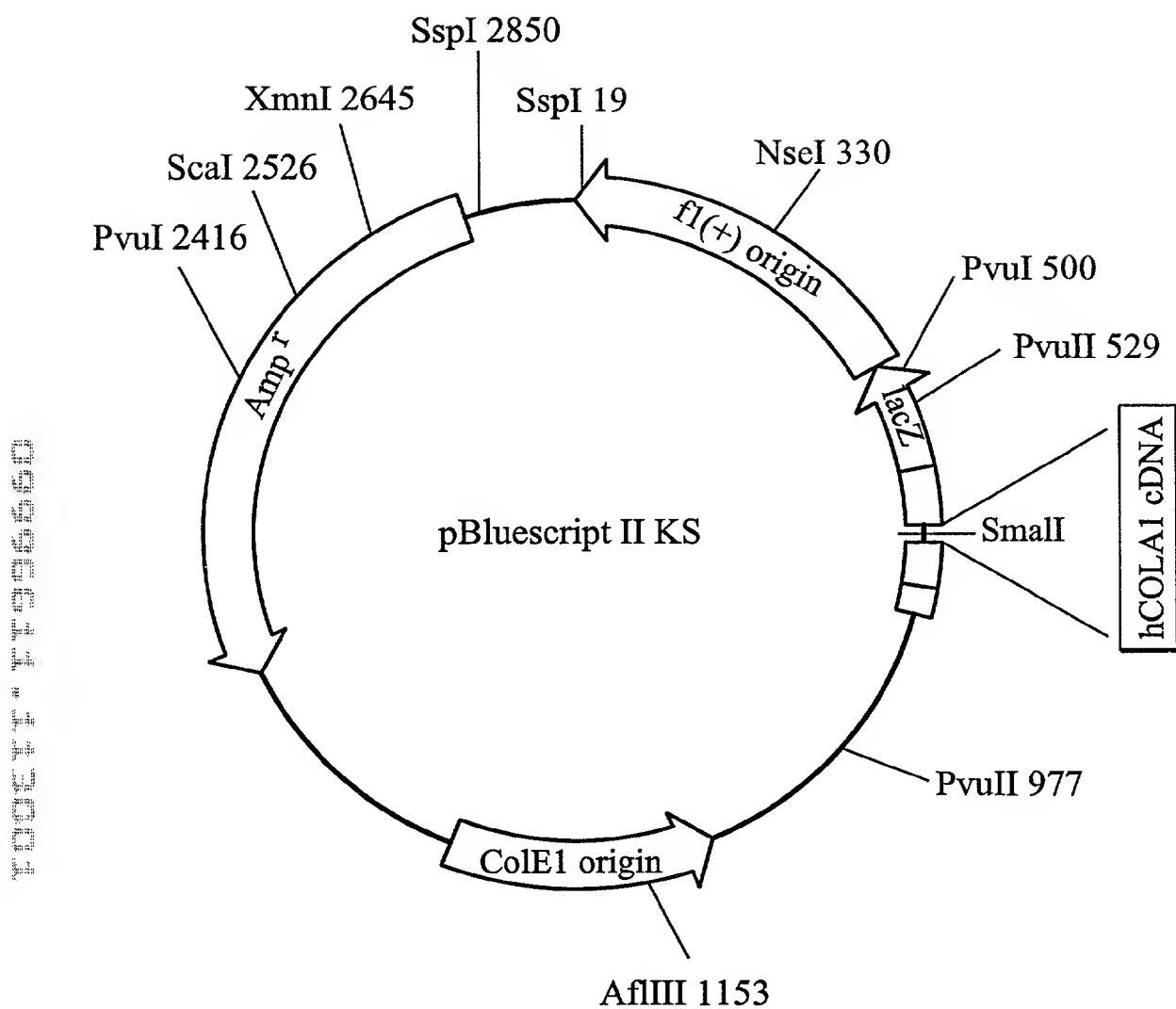


FIG. 2

1 ATGGCTCACTATATTACATTTCTCTGCAATGGTTTGTGGCTGCTTCTTCAGAAATTCGTGTTAGAGATGGGATGATGATCAAGTTGTGTTACTGCTCCGACAGATTTAGTTTTC  
H A H Y I T F L C M V L V L L Q N S V L A E D G E V R S S C R T A P T D L V F 40  
121 ATCTTAGATGGCTCTTATAGTTGTGGCCAGAAACTTTGAATAGTGAAAGATGGCTTGTCAATATACAAAAACTTTTGACATATAGGCGGAAGTTTATTAAGTTGGAGTGGTTCAA  
I L D G S V G F I V K K W L N I T K N F D I G P K F I Q V G V Q 80  
241 TATAGTGACTACCGTGTGCTGGAGATTCTCTCGGAAGCTATGATTCAGGAGAACATTCAGGGCAGCAAGTGAATCCATCTTACTTTAGGAGAAACACAAAGCAGGAGGCCATC  
Y S D Y P V L E I P L G S Y D S G E H L T A V E S I L Y G N T K T G K A I 120  
361 CAGTTTGGCTCGAATTACCTTTTGGCAAGTCCCTCAGGATTTCTGACTAGATAGCAGTGGTACTTTAGGGATGGCAAAATCCCAAGTACAGCTCAAGCAGCAAGAGAT  
Q F A L D Y L F A K S S R F L T K I A V V L T D G K S Q D D V K D A A Q A A R D 160  
481 AGTAGATAACATTAATTTGCTATTTGGTGTGGTTTCAGAAACAGAGATGGCGAATTTAGAGATTTGACAAAGGCTTTCGTCTACTTTATGTGGAAAGACTATATTGCAATA  
S K I T L F A I G V G S E T E D A E L R A I A N K P S S T Y V F Y E D Y I A I 200  
601 TCCAAATTAAGGGAAGTGAAGCAGAACTTTGTGGAAGATCTGTCTGTCCAACAGANTTCAGGCGAGCTGTGTGATGAAGGGGATTTGATTTCTTTTAGGTTTAGATGTAAAT  
S K I R E V H K Q K L C E S E V K L P V L G I L I N G Q T Q I K G F D I L G L D V N 240  
721 AAAAGGTTAAGAAAGATACAGCTTTCCACAAAAGATAAAGGATGAAGTAACATAAAGTTGATTTATCAGAACTACAGCAATGTGTTTCCAGAGGCTTCTCCCTCCATCA  
K K V K K R I Q L S P K K I K G Y E V T S K V D L S E L T S N V F P E G L P S 280  
841 TATGTATTTGTCTACTCAAGATTTAAGTCAAGAAATTTGGCAATTTATGAGATATTAACCTATTGATGAAGGCCACAAATAGCAGTTACCTTTAAATGGTGTGGCAAAATCTTA  
Y V F V S T Q R F K V K K I W D L W R I L T I D G R P Q I A V T L N G V D K I L 320  
961 TTATTTAACAAACAGCGTAATTAATGGCTACAGAGTGTACCTTTGCTAAGTGAAGAGCTGTGTTGATGAAGCTTGGCACCAAAATTCGTCTTTAGTAACAGAAACAGAT  
L F T T S V I N G S Q V V T F A N P Q V K T L F D E G W H Q I R L L V T E Q D 360  
1081 GTGACTTTGTATATTGATGACCAACAAATTAAGAAAGCCCTTATCCAGTTTATAGGATCTTGATCAATGGGCAACCCAAATTCGAAATAATTTCTGGAAAGAAAGAACTGTTCAG  
V T L Y I D Q I E N K P L H P V L G I L I N G Q T Q I K G F D I L G L D V N 400  
1201 TTTGATGTCAAAAGTTGGCAATCTACTGTGACCCAGAACAGCAAGCGGAGACAGCATGTGAGATTTCTGATTTTGGCTTAAATGGTCCCAAGTGTAGTGTTCAACTCCAGCTCC  
F D V Q K L R I Y C D P E Q N N R E T A C E I P G F C L N G P S D V G S T P A P 440  
1321 TGTATTTGTCTCCGGGAACCCAGGACTTCANGGCCCAAGGCTTCCCTGGAGCTTCCTGTGGAACTTGGCTTACCTTGGCAAGCTTGGTCAAGATGTGATGATATCAAGGAAAT  
C I C P P K P G L Q G P K D G P G L G N P G Y P Q Q G D G K P G Y Q I 480  
1441 GCAGGACACAGGTGTTCCAGATCTCCAGGAATACAGGAGCTCGAGAGTACCAAGGATTAAGAAAGAACAGGGGAGATGTGTGACAAAGGTGATCTGTGGACTTCTGTGGTTTTCCT  
A G T P P G V P G S P G I Q G A R L G P Y K G E P G D G K D R G L P G F P 520  
1561 GGGCTTCATGGCATGCCAGATCAAGGGGTGAATGGTCCAAAGGAGCAAGGATCACTGTGATTTTATGCAAAAGGCTGCAAAAGGTGCAAAAGGGAATGCTGCGTCCCTGGC  
G L H G M P G S K G E M A G A K G D K K G S P G F Y G K K G A K G E K N A G F P G 560  
1681 CTCCTGGACTGTGGAGAACCCAGGAGCATGGAAGGATGGATTAATGGTGTAGTCCCGTGTTCAGGCGAAGCAGGATCCCTGTGCTCCGGGCGAGATGGAACACGGGAGAG  
L P G P A G E P G R H G K D G L H G S P G F K G E A G S P G A P G Q D G T R G E 600  
1801 CCTGGAAATCCAGGATTTCTGGAACCGGGATTAATGGGCCAAAGGAGAAATTTGGGCTTCAGGACAGCAAGGAAAGAGGCCCCAGGATGCTGTGTTTAAATGGGAAGCAAT  
P G I P G F P N R G L M G Q K G E I G P P G Q Q G K G A P G H P G L H G S N 640  
1921 GGCCTACAGGCCAGCTGGAACACCGGATCTAAGGGAAGCAAGGTGACCTGGAAATTCAGGGATGCTTGGGCTCAAGGGAGAACCAAGGAGCAAGCGGTTCCTCCAGGA  
G S P G Q P G T P G S K G E P G I Q G H P G I Q H P G A S G L K G E P G A T G S P G 680  
2041 GAACCAAGATACATGGGTTTACCCGGATTCAAGGAAAGAGGGGACAAAGGAAATCAAGGTGAAGGATTCAGGGTCAAAAGGGAGAAATGGAAGACAGGAAATTCACAGGCAAA  
E P G Y M G L P G I Q G K K G D K G N Q G E K G I Q G Q K G E N G R Q G I P G Q 720  
2161 CAGGGAATTCAGGCCATCATGTGTCAAAAGGAGAGAGAGTGAAGAGAGAACCTGTGTCCAGGTGCAATTCGATCAAAAGGGAATTCGGGTGGATGCTGTGATGGGCGCGCA  
Q G I Q G H G A K G E R G E K G E P G V R G A I G S K G E S G V D G L M G P A 760  
2281 GGTCTAAGGGGCAACCTGGGGATCCAGTCTCAGGACCCCAAGTTTGGATGGGAAGCCCGGAAGAGAGTTTTCAGAAACAATTTTATTCGACAAAGTTTGCACAGATGTGTAATAAGGCC  
G P K G Q P G D P G P G L D G K P G R E F S E Q F I R Q V C T D V I R A 800  
2401 CAGCTACCAAGTCTTACTTACAGTGGAGAAATTAAGAAATTTGTGATCATTTGCTGTCCCAACATGCTCCCGGGTATTCCTGGGCCACCTGGTCCGATAGGCCCCAGAGGTTCCCGAGGA  
Q L P V L L Q S G R I R N C D H C L S P G I P G P G I P G P G I G P E G P R G 840  
2521 TTACCTGGTTTGGCAGGAGAGATGGTGTCTGGATTAGTGGGTGCTCCCTGGACGTCCAGGTGTCAAGAGGCTTAAAGGCTTACAGGAGAAATGGGAAAGAGGCGCAAGGCTTT  
L P G L P G R D G V P G L V G V P G R P G V R G L K G L P G R N G E K G S Q G F 880  
2641 GGGTATCTGGAGAACAGTCTCTGTGCTCCCGAGGTCCAGAGGCTCTCTGGAATGAAGAGAGTCTCCAGGAGACCCAGGCTCTCCCTGGCAAGATGAGAGACCATGGAATA  
G Y P G E Q P P G P G P G I S K E G P G D P G L P G K D G D H G K 920  
2761 CTTGGAATCCAAAGGGCAACAGGCCCCCGAGGCATCTGCGAGACAGATCCGTTTCAGAAAGGAGACCAACTATTAG  
P G I Q G Q P P G I C D P S L C F S V I A R R D P F R K G P N Y \*

FIG. 3

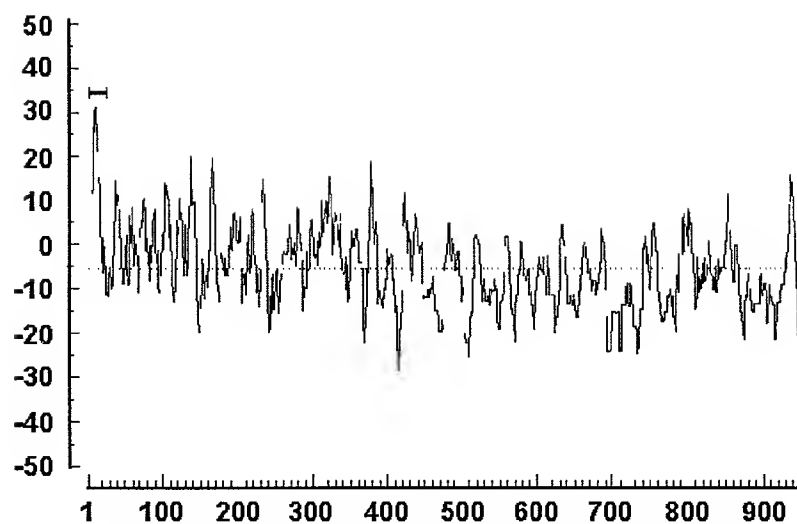


FIG. 4

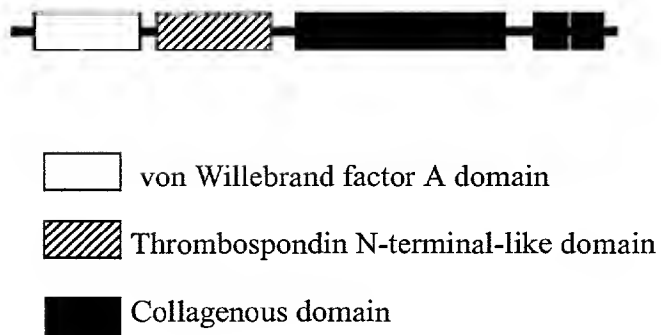


FIG. 5

hCOLA1 PRO M A - - - - - H Y I T F L C M V L V L L L Q N S V L A E 23  
Col9a1.pro M K - - T C W K I P V F F V C S F L E P W A S A A V K R R 28  
Col19a1.pro M R L T G P W K L - - W L W M S I F L L P - A S T S V T V R 27

hCOLA1 PRO D G E V R S S C R T A P T D I V F I L D G S Y S V G P E N F 53  
Col9a1.pro P R F P V N S N S N G G N E I C P K I R I G - Q D D I P G F 57  
Col19a1.pro D K - - - - - T E E S C P I I R I E - G H Q I T - Y 46

hCOLA1 PRO E I V K K W L V N I T K N F D I G P K F I Q V G V V Q Y S D 83  
Col9a1.pro D L I S Q F Q V D - - - K A A S R R A I Q R V V G S A T 82  
Col19a1.pro D N I N K L E V S - - G F D L G D S F S L R R A F C E S D 73

hCOLA1 PRO Y P V L E I P L G S Y D S G E H I T A A V E S L - L Y L G G 112  
Col9a1.pro L Q V - - - - - A Y K L G N N V D F R I P T R N I Y - - 103  
Col19a1.pro - K T - - - - - C F K L G S A L L I R - D T I K I F - - 92

hCOLA1 PRO N T K T G K A I Q F A L D Y L F A K S S R F I T K I A V V L 142  
Col9a1.pro - - P S G I P E E Y S F L T T F R M T G S T I K K N W N I W 131  
Col19a1.pro - - P K G L P E E Y S V A A M F R V R R N A K K E R W F L W 120

hCOLA1 PRO T D G K S Q D D V K D A A Q A A R D S K I T L F A I G V G S 172  
Col9a1.pro Q I Q D S S G K E Q V G I K I N G Q T Q S V V F S Y - - 157  
Col19a1.pro Q V L N Q Q N I P Q I S I V V D G G K K V V E F M F - - 146

hCOLA1 PRO E T E D A E L R A I A N K P S S T Y V F V E D Y I A L S K 202  
Col9a1.pro K G L D G S L Q T A A F S N - - I S S I F D S Q W H K I M I 185  
Col19a1.pro Q A T E G D V L N Y I F R N R E L R P L F D R Q W H K L G I 176

hCOLA1 PRO I R E V M K Q K I C E E S V C P T R I P V A A R D E - - - R 229  
Col9a1.pro G V E R S S A T L F V D C N R I E S L P I K P R G P I D I D 215  
Col19a1.pro S I Q S Q V I S I Y M D C N L I A R R Q T D E K D T V D F H 206

hCOLA1 PRO G F D I I L G I D V N K K V K K R I Q I S P K K I K G Y E V 259  
Col9a1.pro G F A V L G K L A D N P Q V S V P F E I Q W M L I H C D P L 245  
Col19a1.pro G R T V I A T R A S D G K - P V D I E L H Q L K I Y C S A N 235

hCOLA1 PRO T S K V D L S - E I T S N V F P E - - - - G L P P S Y V F 283  
Col9a1.pro R P R R E T C H E L P A R I T P S Q - - - - - 263  
Col19a1.pro L I A Q E T C C E I S D T K C P E Q D G F G N I A S S W V T 265

hCOLA1 PRO V S T Q R F K - - V K K I W D L W - - - R I L T I D G R P Q 308  
Col9a1.pro - - - - - - - - - - - - - - - - - - - 263  
Col19a1.pro A H A S K M S S Y L P A K L E L K D Q C Q C I P N K G E A G 295

hCOLA1 PRO I A V T L N G V D K I L L F T T T S V I N G S Q V V T F A N 338  
Col9a1.pro - - - T T D E R G P P G E Q G P P G A S G P P G V P G I D G 290  
Col19a1.pro L P G A P G S P G Q K G H K G E P G E N G L H G A P G F P G 325

hCOLA1 PRO P Q V K T L F D E G W H Q I R L L V T E Q D V T L Y I D D Q 368  
Col9a1.pro I D G - - - - D R G P K G P P G P P G P A G E P G K P G A P 316  
Col19a1.pro Q K G - - - - E Q G F E G S K G E T G E K G E Q G E K G D P 351

hCOLA1 PRO Q I E N K P L H P V I G I L I N G Q T Q I G K Y S G K E E T 398  
Col9a1.pro G K P G T P G A D G L T G P D G S P G S I G S K G Q K G E P 346  
Col19a1.pro A L A G L N G E N G L K G V L G P H G P P G P K G E K G D T 381

hCOLA1 PRO V Q F D V Q K L - - R I Y C D P E O N N R E T A C E I P G F 426  
Col9a1.pro G V P G S R G F P G R - G I P G P P G P P G T A G L P G E L 375  
Col19a1.pro G P P G P P A L P G S L G I Q G P Q G P P G K E G Q R G R 411

hCOLA1 PRO C L N G P S D V G S T P A P C I C P P G K P G - - - - - 449  
Col9a1.pro G R V G P V G D P G R R G P - P G P P G P P G P R G T I G F 404  
Col19a1.pro G K T G P P G K P G P P G P - P G P P G I Q G I H Q T L G G 440

hCOLA1 PRO - - - - - - - - - - - L Q G P K G D P G I P G N P 463  
Col9a1.pro H D - - - - - G D P L C P N A C P P G R S G Y P G I P G M R 429  
Col19a1.pro D D N K D N K G N D E H E A G G L K G D K G E T G I P G F P 470

FIG. 6A



hCOLA1 .PRO	L V G V P G R P G V R G L K G L P G R N G E K G S Q G F - -	880
Col9a1.pro	A L G L R G P K G D L G E K G E R G P P G R - - - - -	848
Col19a1.pro	P M G P P G N K G S M G S P G H Q G P P G S P G I P G I P A	1010
hCOLA1 .PRO	- - - - -	880
Col9a1.pro	- - - - -	848
Col19a1.pro	D A V S F E E I K K Y I N Q E V L R I F E E R M A V F L S Q	1040
hCOLA1 .PRO	- - - - - G Y P G E Q G P P G P P G P	894
Col9a1.pro	- - - - - G P N G L P G A I G L P G - - - D	862
Col19a1.pro	L K L P A A M L A A Q A Y G R P G P P G K D G L P G P P G D	1070
hCOLA1 .PRO	E G P P G I S K E G P - - - - - P G D P G L P G	913
Col9a1.pro	P G P A S Y G K N G R D G E R G P P G - - - - -	881
Col19a1.pro	P G P Q G Y - - R G Q K G E R G E P G I G L P G S P G L P G	1098
hCOLA1 .PRO	K D - - - - - G D H G K P G I Q G Q P G P P G I C D P S L C	938
Col9a1.pro	- - - - - L A G I P G V P G P P G P P G L P G F C E P A S C	906
Col19a1.pro	T S A L G L P G S P G A P G P P G P P G P S G R C N P E D C	1128
hCOLA1 .PRO	F S V I A R R D P F R K G P N Y	954
Col9a1.pro	T M Q L V S - E H L T K G L T L E R L T A A W L S A	931
Col19a1.pro	L Y P V S H - A H Q R T G - - - - - G N	1142

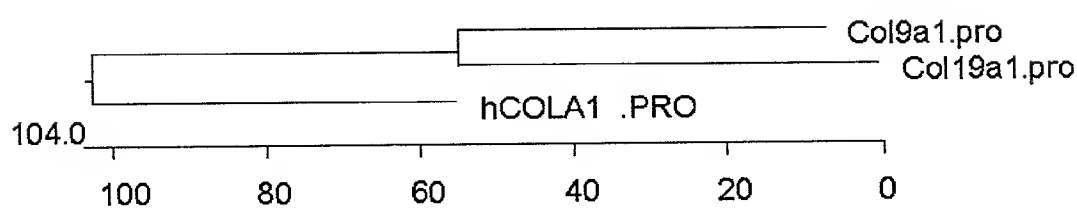


FIG. 6C

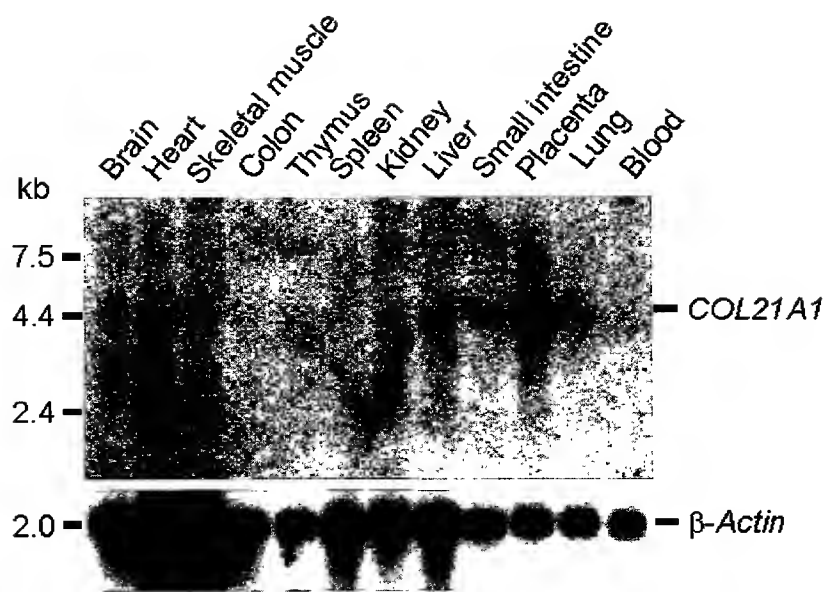


FIG. 7A

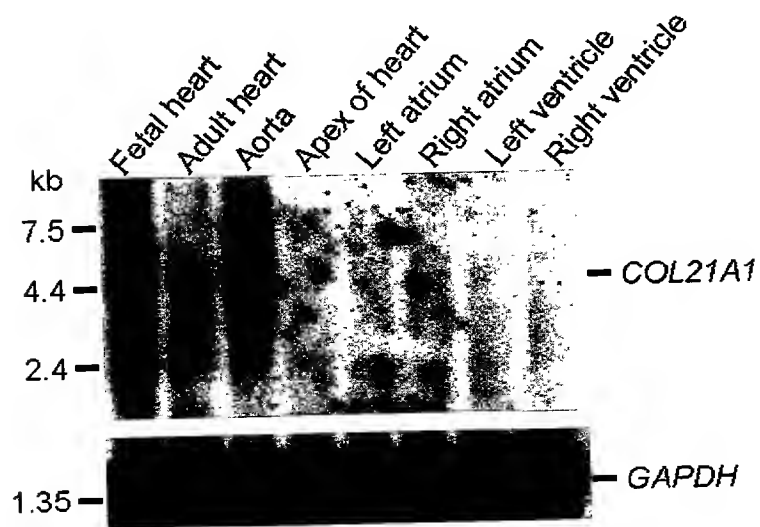


FIG. 7B



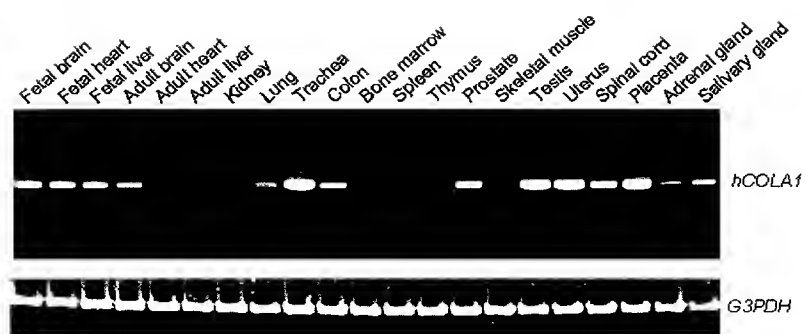


FIG. 8



FIG. 9A



FIG. 9B



FIG. 9C

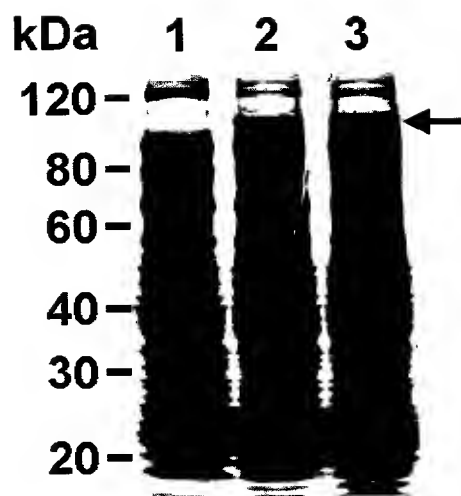


FIG. 10A

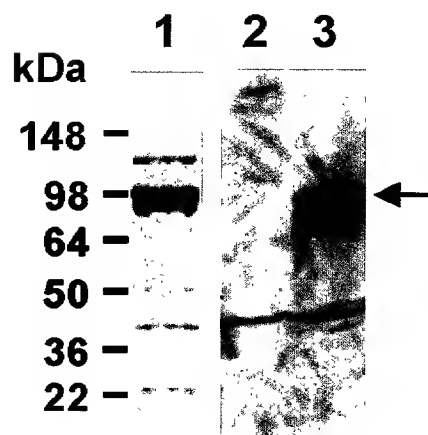


FIG. 10B

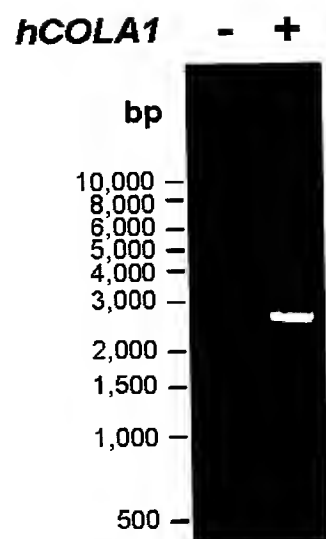


FIG. 11